Amendment to the Specification:

(1)   In the Brief Description of Drawings, please replace the paragraphs beginning at page 5, *l.* 13 and ending at page 5, *l.* 16 with the following rewritten paragraphs:

--**FIGS. 3a** shows the frequency dependency of the amplitude of a SFM with ~~an~~ a̲ nanotube tip engaged in tapping mode.

FIG. 3b shows the result of a direct numerical simulation using a buckling force equation.

FIG. 3c shows how the amplitude of an SFM cantilever (driven at a frequency of 253.8 kHz) changes as it engages a surface.--

(2)   In the Brief Description of Drawings, please replace the paragraph beginning at page 5, *l.*18 and ending at page 5, *l.* 19, with the following rewritten paragraph:

--**FIGS. ~~5a-b~~ 5a-c** show the frequency dependency of a cantilever having a nanotube probe immersed in water.

(3)   In the Detailed Description of the Invention, please replace the paragraph beginning at page 18, *l.* 11 and ending at page 18, *l.* 22 with the following rewritten paragraph:

--The nanotube tip shown in **Figs. 2a-c** was operated in tapping mode SFM. **Fig. 3a** shows the frequency dependence of the amplitude of the cantilever as it engaged a freshly cleaved surface of mica in air. As seen in ~~the inset~~ **Fig. 3c**, the tapping amplitude when the cantilever was driven near its resonant frequency (253.8 kHz) dropped rapidly as soon as the nanotube tip came in contact with the mica surface. The amplitude dropped to near zero when the nanotube hit the surface at the midpoint of its oscillation, and then recovered to nearly the full in-air amplitude when the surface was so close that the tip was always in contact, with the nanotube flexing throughout the oscillation. **Fig. 3b** shows the result of a direct numerical simulation of this experiment using the buckling force expression of equation (1). The sharpness of the recovery of oscillation amplitude near the critical frequency, ω 254.2 kHz is a sensitive function of the buckling force.--